

IN THE CLAIMS

The pending claims are as follows:

1. (Cancelled).

2. (Previously Presented) A method of operating a disc drive having a semi-conductor laser device, the method comprising the steps of:

applying electrical power to said semi-conductor laser

5 device;

measuring a light intensity of a laser beam generated by said semi-conductor laser device;

controlling said electrical power such that said light intensity remains constant;

10 measuring at least one electrical parameter (VCL; I) indicative of the work point (W) of said semi-conductor laser device; and

determining an operational temperature of said semi-conductor laser device on the basis of a predetermined relationship
15 between said work point and said operational temperature.

3. (Previously Presented) The method of operating a disc drive as claimed in claim 2, wherein the method further comprises the step of:

5 taking temperature reducing steps if the measured value of
said at least one electrical parameter indicates that the
operational temperature of the laser device has reached a
predetermined critical temperature.

4. (Previously Presented) The method as claimed in claim 3,
 wherein said step of measuring at least one electrical
parameter comprises measuring a plurality of electrical parameters
indicative of the work point of said semi-conductor laser device,

5 and wherein said temperature reducing steps are taken if
at least one of said plurality of electrical parameters indicates
that the operational temperature of the laser device has reached a
predetermined critical temperature.

5. (Previously Presented) The method as claimed in claim 3,
wherein the at least one electrical parameter is compared with a
predetermined parameter level.

6. (Previously Presented) The method as claimed in claim 5,
 wherein said electrical parameter is measured at a certain
known temperature of the laser device, this measured value being
taken as zero value,

5 wherein said electrical parameter is measured during
operation of the disc drive to yield an actual value,

and wherein the difference between the actual value of said electrical parameter and said zero value is compared with a predetermined threshold.

7. (Previously Presented) The method as claimed in any one of claims 3-6, wherein said temperature reducing steps comprise, the step of operating a cooling device or a ventilator, or the step of reducing a clock frequency, or the step of reducing a rotational speed of a motor of said disc drive.

8. (Previously Presented) The method as claimed in claim 7, wherein the rotational speed of the motor of said disc drive is reduced when said electrical parameter reaches a first predetermined parameter level indicative of said semi-conductor laser device having reached a predetermined critical temperature, and wherein the rotational speed of said motor of said disc drive is increased when said electrical parameter reaches a second predetermined parameter level indicative of said semi-conductor laser device having reached a normal temperature.

9. (Previously Presented) A disc drive comprising:
a disc drive motor for rotating an optical disc;
a laser device for generating a laser beam for scanning the optical disc; and
a control unit for controlling the disc drive motor and the laser device,

wherein the control unit monitors at least one electrical parameter indicative of a work point of a semi-conductor laser of said laser device, and takes laser device temperature affecting steps in
10 dependence on said at least one electrical parameter.

10. (Previously Presented) The disc drive as claimed in claim 9, wherein the control unit controls the rotational speed of said disc drive motor in dependence on said at least one electrical parameter.

11. (Previously Presented) The disc drive as claimed in claim 9 or 10, wherein said disc drive further comprises:

a light intensity sensor coupled to an input of the control unit, said light intensity sensor receiving at least a
5 portion of the laser beam generated by the semi-conductor laser, said light intensity sensor generating a measuring signal representative of the light intensity of said laser beam;

the control unit controlling said semi-conductor laser in response to said measuring signal such as to maintain a constant
10 laser beam intensity.

12. (Previously Presented) The disc drive as claimed in claim 11, wherein said at least one electrical parameter comprises an output voltage of the control unit.

13. (Previously Presented) The disc drive as claimed in claim 11,
wherein said at least one electrical parameter comprises a
difference between an actual value of the output voltage of the
control unit and a zero value of said output voltage of the control
5 unit measured at a certain known temperature of the laser device.

14. (Previously Presented) The disc drive as claimed in claim 9,
wherein said disc drive comprises a plurality of semi-conductor
lasers;

wherein the control unit has a plurality of outputs each
5 providing a corresponding control signal to a corresponding one of
said semi-conductor lasers;

and wherein the control unit monitors a single signal
indicative of a work point of only one of said semi-conductor
lasers, and takes laser device temperature affecting steps in
10 dependence on said single threshold voltage indicating signal.

15. (Cancelled).